metres) deep, the hydrologic, hydraulic, and structural design of the fill and appurtenant spillways shall have the approval of the State or Federal agency responsible for the safety of dams or like structures within the State, prior to authorization by the Division Administrator to advertise for bids for construction.

§650.117 Content of design studies.

- (a) The detail of studies shall be commensurate with the risk associated with the encroachment and with other economic, engineering, social or environmental concerns.
- (b) Studies by highway agencies shall contain:
- (1) The hydrologic and hydraulic data and design computations,
- (2) The analysis required by §650.115(a), and
- (3) For proposed direct Federal highway actions, the reasons, when applicable, why FEMA criteria (44 CFR 60.3, formerly 24 CFR 1910.3) are demonstrably inappropriate.
- (c) For encroachment locations, project plans shall show:
- (I) The magnitude, approximate probability of exceedance and, at appropriate locations, the water surface elevations associated with the overtopping flood or the flood of \$650.115(a)(1)(ii), and
- (2) The magnitude and water surface elevation of the base flood, if larger than the overtopping flood.

Subpart B—Erosion and Sediment Control on Highway Construction Projects

Source: 59 FR 37939, July 26, 1994, unless otherwise noted.

§650.201 Purpose.

The purpose of this subpart is to prescribe policies and procedures for the control of erosion, abatement of water pollution, and prevention of damage by sediment deposition from all construction projects funded under title 23, United States Code.

§650.203 Policy.

It is the policy of the Federal Highway Administration (FHWA) that all

highways funded in whole or in part under title 23, United States Code, shall be located, designed, constructed and operated according to standards that will minimize erosion and sediment damage to the highway and adjacent properties and abate pollution of surface and ground water resources. Guidance for the development of standards used to minimize erosion and sediment damage is referenced in §650.211 of this part.

§650.205 Definitions.

Erosion control measures and practices are actions that are taken to inhibit the dislodging and transporting of soil particles by water or wind, including actions that limit the area of exposed soil and minimize the time the soil is exposed.

Permanent erosion and sediment control measures and practices are installations and design features of a construction project which remain in place and in service after completion of the project.

Pollutants are substances, including sediment, which cause deterioration of water quality when added to surface or ground waters in sufficient quantity.

Sediment control measures and practices are actions taken to control the deposition of sediments resulting from surface runoff.

Temporary erosion and sediment control measures and practices are actions taken on an interim basis during construction to minimize the disturbance, transportation, and unwanted deposition of sediment.

§ 650.207 Plans, specifications and estimates.

- (a) Emphasis shall be placed on erosion control in the preparation of plans, specifications and estimates.
- (b) All reasonable steps shall be taken to insure that highway project designs for the control of erosion and sedimentation and the protection of water quality comply with applicable standards and regulations of other agencies.

[39 FR 36332, Oct. 9, 1974]

§650.209 Construction.

(a) Permanent erosion and sediment control measures and practices shall be established and implemented at the